

ATTACHMENT J1

Tinker AFB Electric Distribution System

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J1 Tinker AFB Electric Distribution System

J1.1 Tinker AFB Overview

Centrally located in Oklahoma County, Tinker AFB occupies 5,041 acres on the southeast edge of Oklahoma City, Oklahoma. Tinker AFB is the logistics leader in providing specialized logistics support, management, maintenance, and distribution to defense weapons systems worldwide. Tinker AFB is located near the intersection of three major interstate highway systems. The Base is bounded by Midwest City to the north, Del City to the west, and Oklahoma City to the east, south, and southwest. Tinker AFB maintains a close relationship with local communities and provides a substantial economic impact on the surrounding region.

J1.1.1 Installation History

In 1940, a group of Oklahoma City civic leaders and businessmen learned that the War Department was considering the central United States as a location for a maintenance and supply depot. The City leaders targeted a 480-acre site and acquired an option for 960 additional acres of land adjoining SE 29th Street. On 8 April 1941, the order was officially signed awarding the depot to Oklahoma City.

In 1942, the new installation was named Tinker Field in honor of Major General Clarence L. Tinker of Pawhuska, Oklahoma. General Tinker lost his life while leading a flight of LB-30 “Liberators” on a long-range strike against Japanese forces on Wake Island during the early months of World War II.

Immediately following World War II, Tinker expanded to include the Douglas aircraft assembly plant and was named the Oklahoma City Air Materiel Area (OCAMA). The Base remained an important logistics center as it began to service jet engines of the modern Air Force, and became an all jet maintenance facility by 1953. In June of 1954, Tinker accepted delivery of its first B-52 Stratofortress.

Throughout the Korean conflict, Tinker continued its output, keeping planes flying and funneling supplies to the Far East. In 1955, Tinker gained a major tenant with the addition of the 506th Tactical Fighter Wing.

By the end of the 1950s, OCAMA received a complete management system overhaul to accommodate the latest Air Force weapons – the B-52 bomber and the KC-135 tanker.

During the 1960s, Tinker’s support of additional aircraft grew. During that decade the depot became the single place for overhauling the J57, TF30, and J79 engines, as well as new communications and electronics systems. Tinker’s Combat Control Station played a major role during the Cuban Missile Crisis. In 1966, Tinker became the world’s largest jet engine repair and overhaul facility when it took on the maintenance of the TF30 engines which powered the swing-winged F-111 Aardvark. Tinker was designated an inland aerial port of embarkation (APOE) in December 1967 in recognition of Tinker’s importance as a logistic hub.

During the 1970s, the Base took on management of new weapons including the A-7D Corsair, the E-3A Airborne Warning and Control (AWAC) aircraft, the E-4 Airborne Command Post aircraft, and the BGM 109 Ground Launched Cruise Missile. In 1974 the depot was renamed the Oklahoma City Air Logistics Center.

In the 1980s, the revitalized B-1B Lancer, the Air Launched Cruise Missile, and the KC-10 Extender were added to an already impressive list of OC-ALC management responsibilities. In the mid-1980s the 552nd Airborne Warning and Control Division upgraded to the E-3 Sentry, became a Wing once again, and was placed under the 28th Air Division.

In 1991, two Navy E-6 squadrons were activated at Tinker AFB to maintain a flying communications link between the National Command Authority and ballistic missile submarines around the world.

Tinker AFB and OC-ALC provided front line support to the forces engaged in Operation Desert Shield and Desert Storm in the early 1990s. In 1993, two significant changes occurred at Tinker when the Aerial Port of Embarkation closed, and the new B-2 Stealth Bomber Weapons Systems Support Center opened. In 1997, Tinker received the first shipment of equipment to support the core engine workload previously done at Kelly Air Force Base.

Today, Tinker AFB's mega aviation complex contains over 700 buildings (excluding housing), 2 operational runways, 234 acres of ramp space, and 48 miles of roadways. The Base is a multi-faceted member of the Air Force team containing several diversified organizations and missions including the Oklahoma City Air Logistics Center, and the Navy.

J1.1.2 Physical Assets

Facilities at the Base encompass two runways, associated taxiways and parking aprons; administrative areas; industrial facilities; dormitories and housing areas; and recreational facilities and open space. The physical profile of Tinker AFB is shown in the following table.

Installation Assets	
Land Area	5,041 Acres
Buildings	750; 15,625,507 SF
Military Family Housing	730 Units; 1,083,972 SF
Surface Roads	48 Miles
Runway 17/35	11,100 Feet
Runway 12/30	10,000 Feet
Aircraft Ramp Space	234 Acres
Indoor Maintenance	136 Acres
Covered Storage	79 Acres

Nearly all of the Tinker AFB land area is fee owned, including two GSUs. The one exception is the Glenwood Area GSU, a 343-acre leased plot located north of Interstate Highway 40.

Tinker AFB is comprised of several geographically defined sub-areas. These architectural/planning districts contain functionally related facilities, similar architectural treatments, and function as a useful geographical identifiers. These districts are defined as follows:

- North Side Industrial District (Area A)
- Southeast Munitions District (Area B)
- Northeast Industrial District (Area C)
- 38 EIG District (Area D)
- West Community District (Area E)
- South Forty (Southwestern/Navy) District
- Airfield District

J1.1.3 Mission, Organization, and Associate Units

The primary mission of Tinker Air Force Base is to provide for the management, storage, and depot level maintenance of all components and the end items of all major weapon systems assigned to the Air Logistics Center.

Tinker AFB's largest organization is the OC-ALC, one of three depot repair centers in the Air Force Materiel Command (AFMC), with headquarters at Wright-Patterson AFB, Ohio. Tinker AFB is also home to several major Department of Defense, Air Force, and Navy activities with critical national defense missions.

The OC-ALC is the worldwide manager for a broad range of aircraft, engines, missiles and commodity items. The OC-ALC manages over 40 aircraft types including the B-1B Lancer, B-52 Stratofortress, B-2 Spirit, E-3 Sentry and KC-135 series, in addition to providing logistics support for the Air Launched Cruise Missile, Short Range Attack Missile, Harpoon and Advanced Cruise Missiles. Overall, the center manages and maintains an inventory of more than 13,000 engines, 3,000 missile systems and 42,000 components supporting 9,100 aircraft.

Major units at TAFB include:

- 552 Air Control Wing (ACW)
- 507th Air Refueling Wing (ARW)
- Navy's Strategic Communications wing ONE
- 3rd Combat Communications Group (CCG)
- 38th Engineering Installations Group (EIG)
- 72nd Air Base Wing (ABW)
- Defense Distribution Depot
- Defense Megacenter Oklahoma City

J1.1.4 Population

The Base population profile is as shown in the following table:

Category	Population
Active Duty U.S. Military	7,791
Air National Guard/ Air Force Reserve	1,368
Appropriated Fund Civilians (including Reserve technicians)	12,765
Non-appropriated Fund Civilians	2,271
Total Employees	24,195
On/Off Base Dependents	18,237

J1.1.5 Housing

Military Family Housing consists of 730 dwelling units located in four neighborhood areas; Twining Fields, Vandenberg Hills, McNarney Manor, and Mitchell Heights. Units are a combination of multiplex (2-8 units per structure) and single family units.

Currently, many of the units are projected to be renovated, many are to be demolished (flood zone siting issues), and additional units will be constructed. All of this work is expected to be done in concert with, or as part of, an ongoing Housing Privatization (HP) initiative. The total number of units currently supported by the Housing Requirement Market Analysis and included as the total HP requirement will be 858 units. Because of the anticipated widespread changes to the housing layout, all military family housing utilities will be included in the HP package and excluded from this UP package.

J1.1.6 Geographically Separated Units

Other geographically separated units (GSUs) are summarized below:

38TH ENGINEERING INSTALLATION GROUP (EIG)

The 38th EIG has worldwide responsibility for engineering and installation of all AF electronic and communications facilities. This GSU is situated on approximately 120 acres located about ½ mile east of the Douglas Avenue (Tinker's eastern border) and south of SE 59th Street.

COMPREHENSIVE HANDS-ON TRAINING (CHOT) SITE

This site is a remote training site for the 3rd Combat Communications Group on a 14-acre plot located a few hundred feet east of the EIG and also south of SE 59th Street.

GLENWOOD

As mentioned earlier, Glenwood is a leased 343-acre parcel situated a few hundred feet north of Tinker AFB. This property (formerly an off-Base residential area) was purchased in 1985 by the County of Oklahoma. Residences were demolished and the parcel was leased for one dollar to Tinker AFB for a period of 50 years. This former residential area was in

Accident Potential Zone One (APZ-1) of the main runway (north end) and presented a serious encroachment problem. Oklahoma County officials took this action to resolve this encroachment problem, and to solidify the future viability of Tinker AFB. Because Glenwood is part of APZ-1, usage is limited to periodic troop bivouac activities and there will never be permanent facility development there.

J1.2 Electric Distribution System Description

J1.2.1 Electric Distribution System Fixed Equipment Inventory

The Tinker AFB electric distribution system consists of all appurtenances physically connected to the distribution system from the point where the distribution system enters the Installation and Government ownership currently starts to the points of demarcation, defined by the Right of Way. The system includes, but is not limited to, transformers, circuits, protective devices, utility poles, duct banks, switches, street lighting fixtures, and other ancillary fixed equipment. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the prospective new owner with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization:

- The airfield lighting system;
- Street lighting;
- Parking lot and area/security floodlights mounted on buildings and/or fed from internal building circuitry and controls;
- Sports fields, track, and pedestrian pathway lighting;
- Water tower beacon lights and traffic signals;
- Military Family Housing electrical distribution system (included in the separate ongoing Housing Privatization initiative); and
- Generators.

J1.2.1.1 Description

MAIN BASE

Electrical power for Tinker AFB is purchased from Oklahoma Gas & Electric Company (OG+E) at four metered delivery points, and is delivered by a looped 138-kiloVolt (KV) OG+E transmission line. The OG+E transmission line enters the Base on the northern boundary near Building 11, where it splits and then runs east and west. The western segment extends west and south to Air Force-owned Substation #4. The eastern segment extends east and south to Substations #2 and #5, and then exits the Installation on the

eastern boundary near Building 2211. Substation #3 is located adjacent to the western boundary and is supplied from a separate OG+E 138 kV circuit located along Sooner Road. OG+E metering equipment is located in each of these Air Force substations.

Substation #2 consists of two 138 kV line terminations, two 138 kV oil circuit breakers, two 12/16/20 MVA 138-12.47 kV Load-Tap Changing (LTC) power transformers, one 12 MVA 138-12.47 kV LTC power transformer, and thirteen 12.47 kV metal-clad circuit breakers. It is a conventional, outdoor air-insulated distribution substation configured in a sectionalized duplex bus arrangement. This substation provides voltage regulation, control, and overcurrent protection for ten 12.47 kV feeders.

Substation #3 consists of one 138 kV line termination, one 138 kV oil circuit breaker, one 12 MVA 138-12.47 kV LTC power transformer, and five 12.47 kV metal-clad circuit breakers. It is a conventional, outdoor air-insulated distribution substation configured in a single bus arrangement. This substation provides voltage regulation, control, and overcurrent protection for four 12.47 kV feeders.

Substation #4 consists of two 2.5 MVA 12.47 kV voltage regulators and eleven 12.47 kV metal-clad circuit breakers. It is a conventional, outdoor air-insulated distribution substation configured in a sectionalized duplex bus arrangement. This substation provides voltage regulation, control, and overcurrent protection for eight 12.47 kV feeders.

Substation #5 consists of three 138 kV gas circuit breakers, three 12/16/20 MVA 138-12.47 kV LTC power transformers, and seventeen 12.47 kV metal-clad circuit breakers. It is a conventional, outdoor air-insulated distribution substation configured in a sectionalized triplex bus arrangement. This substation provides voltage regulation, control, and overcurrent protection for fourteen 12.47 kV feeders.

The primary distribution system consists of a total of 36 12.47 kV circuits. It is composed of overhead, pole-line construction (conventional, crossarm/pin insulator, open wire construction practices) with pole-mounted transformer banks, and underground construction (utilizing both duct-type and direct burial construction practices) with both outdoor pad-mounted transformers and indoor primary unit substations. It is estimated that 40 percent of the electrical cable in the Main Base area and 10 percent of the electrical ductbank in the Military Family Housing areas lie beneath 3-inch asphalt pavements.

The overhead primary system is principally composed of bare ACSR conductors of various sizes, with 336 kcmil the most common. The underground primary system is principally composed of shielded copper conductors of various sizes, with #2, 300, and 500 kcmil the most common. The majority of the distribution circuits are configured with loop tie switches to neighboring circuits. The pad-mounted transformers are principally conventional, dead-front units.

There are approximately 72 installed generators on the Installation providing backup power to critical building functions. There is also an OG+E -owned, turbine-powered 80 MW peaking plant located on the Base. This plant supports the OG+E electrical network, but theoretically is capable of carrying the entire Base electrical load. This peaking plant and the 72 installed generators are excluded from this privatization package.

There is no Supervisory Control and Data Acquisition (SCADA) system or Energy Monitoring and Control System (EMCS) to be included in the electric distribution system privatization package.

GSUs

EIG: (Area D) This area is located approximately ½ mile east of the Main Base. Power is supplied by an overhead feeder from the eastern side of the Base proper. This OH feeder traverses non-Government property via an easement granted by the City of Oklahoma City. The electric system in this area is a combination of OH and UG components.

CHOT Site: This small site, very near EIG receives electrical power from the EIG site by OH distribution lines. The OH distribution line crosses non-Government property via an easement granted by the City of Oklahoma City. The minimal electrical components associated with this site are included with the EIG electric system.

Glenwood: This site uses a very small amount of power intermittently for field (bivouac) activities. Power is supplied by a stand-alone OG+E metered supply point. There are no electrical components in this area included in the privatization package.

J1.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Tinker AFB electric distribution system included in the sale. A list of the existing utility meters for the electric system was provided by the Installation and was also used in the development of the inventory components.

TABLE 1
 Fixed Inventory
 Electric Distribution System – Tinker AFB

Component	Size	Unit	Quantity	Approximate Year of Construction
MAIN BASE				
Overhead Line				
Cable Aerial Aluminum	336 MCM	SCLF	103,444	1976
Cable Aerial Aluminum	4/0 ACSR	SCLF	78,668	1976
Cable Aerial Aluminum	4/0 ACSR	SCLF	19,458	1980
Cable Aerial Aluminum	4/0 ACSR	SCLF	13,531	1985
Cable Aerial Aluminum	4/0 ACSR	SCLF	509	2002
Cable Aerial Copper – Bare	4/0	SCLF	59,849	1971
Cable Aerial Copper – Bare	4/0	SCLF	6,486	1980
Cable Aerial Copper – Bare	4/0	SCLF	4,510	1985
Cable Aerial Copper – Bare	4/0	SCLF	169	2002
Underground Line				
Conductor UG Copper	300 MCM	SCLF	16,023	1976
Conductor UG Copper	500 MCM	SCLF	533,401	1976
Conductor UG Copper	500 MCM	SCLF	364	1980
Conductor UG Copper	500 MCM	SCLF	25,357	1985

Component	Size	Unit	Quantity	Approximate Year of Construction
Conductor UG Copper	500 MCM	SCLF	21,664	1990
Conductor UG Copper	#2	SCLF	97,506	1976
Conductor UG Copper	#2	SCLF	1,845	1980
Conductor UG Copper	#2	SCLF	4,312	1985
Conductor UG Copper	#2	SCLF	1,237	2002
Conductor UG Copper	4/0	SCLF	182,692	1976
Conductor UG Copper	4/0	SCLF	569	1980
Conductor UG Copper	4/0	SCLF	8,452	1985
Conductor UG Copper	4/0	SCLF	7,221	1990
Ductbank				
Orangeberg Pipe		LF	130,554	1955
Ductbank – 4" PVC	1x2	LF	16,715	1976
Ductbank – 4" PVC	1x2	LF	82	1985
Ductbank – 4" PVC	4x4	LF	66,860	1976
Ductbank – 4" PVC	4x4	LF	330	1980
Ductbank – 4" PVC	4x4	LF	3,050	1985
Transformers – Pole Mount				
1 PH, Oil Filled	15 kVA	EA	3	1976
1 PH, Oil Filled	37.5 kVA	EA	56	1976
1 PH, Oil Filled	50 kVA	EA	51	1976
1 PH, Oil Filled	50 kVA	EA	30	1980
1 PH, Oil Filled	75 kVA	EA	3	1976
Transformers – Pad Mount				
1 PH, Oil Filled	37.5 kVA	EA	16	1976
1 PH, Oil Filled	50 kVA	EA	6	1976
1 PH, Oil Filled	75 kVA	EA	1	1976
3 PH, Oil Filled	25 kVA	EA	1	1977
3 PH, Oil Filled	45 kVA	EA	2	1977
3 PH, Oil Filled	75 kVA	EA	2	1976
3 PH, Oil Filled	75 kVA	EA	2	1977
3 PH, Oil Filled	100 kVA	EA	2	1977
3 PH, Oil Filled	112.5 kVA	EA	31	1976
3 PH, Oil Filled	150 kVA	EA	34	1976
3 PH, Oil Filled	150 kVA	EA	3	1977
3 PH, Oil Filled	150 kVA	EA	10	1980
3 PH, Oil Filled	150 kVA	EA	4	1985
3 PH, Oil Filled	225 kVA	EA	3	1976
3 PH, Oil Filled	225 kVA	EA	3	1977
3 PH, Oil Filled	300 kVA	EA	5	1977
3 PH, Oil Filled	500 kVA	EA	7	1977
3 PH, Oil Filled	750 kVA	EA	3	1977
3 PH, Oil Filled	1000 kVA	EA	1	1977
3 PH, Dry Type	75 kVA	EA	2	1976

Component	Size	Unit	Quantity	Approximate Year of Construction
3 PH, Dry Type	100 kVA	EA	1	1980
Substation #2				
Transformer, Power	138 kV	MVA	12	1972
Transformer, Power	138 kV	MVA	15	1990
Transformer, Power	138 kV	MVA	15	1997
Transformer, PT	13-26 kV	EA	4	1990
Transformer, PT	13-26 kV	EA	2	1997
Transformer, PT	138 kV	EA	3	1972
Fuses	13-26 kV	EA	4	1990
Fuses	13-26 kV	EA	2	1997
Voltage Regulators	13-26 kV	EA	1	1972
Voltage Regulators	13-26 kV	EA	1	1990
Voltage Regulators	13-26 kV	EA	1	1997
Insulators, Pedestal		EA	45	1972
Disconnect Switches, GOAB	138 kV	EA	8	1972
Lightning Arresters	13-26 kV	EA	15	1990
Lightning Arresters	13-26 kV	EA	18	1997
Lightning Arresters	138 kV	EA	3	1972
Lightning Arresters	138 kV	EA	3	1990
Lightning Arresters	138 kV	EA	3	1997
Circuit Breakers - Oil	138 kV	EA	2	1972
Circuit Breakers - Vacuum	13-26 kV	EA	7	1990
Circuit Breakers - Vacuum	13-26 kV	EA	6	1997
Control Batteries		KAH	0.12	1990
Control Batteries		KAH	0.12	1997
Battery Chargers		EA	1	1990
Battery Chargers		EA	1	1997
Utility Vault – Precast Conc.	8'x14'x7'	EA	3	1972
Bus Support Structure		EA	24	1972
Substation Building		EA	3	1972
Substation Building		EA	2	1990
Aluminum Bus		LF	1,800	1972
Breaker Control Panel		EA	2	1972
Breaker Control Panel		EA	7	1990
Breaker Control Panel		EA	6	1997
Poles, Galv. Steel	35'	EA	6	1972
Mercury Vapor Ext. Fixtures	400W	EA	10	1972
Steel Support Structure, Small		EA	18	1972
Steel Support Structure, Large		EA	1	1972
Grounding, Bare Copper	4/0	SCLF	5,000	1972
Grounding Rods	8'	EA	60	1972
Chain Link Fence		LF	1,120	1972
Concrete Foundation		CY	490	1972

Component	Size	Unit	Quantity	Approximate Year of Construction
Substation #3				
Transformer, Power	138 kV	MVA	12	1983
Transformer, PT	13-26 kV	EA	4	1983
Fuses	13-26 kV	EA	4	1983
Voltage Regulators	13-26 kV	EA	1	1983
Insulators, Pedestal		EA	3	1983
Disconnect Switches, GOAB	138 kV	EA	2	1983
Lightning Arresters	13-26 kV	EA	12	1983
Lightning Arresters	13-26 kV	EA	3	2002
Lightning Arresters	138 kV	EA	6	1983
Lightning Arresters	138 kV	EA	3	1990
Lightning Arresters	138 kV	EA	3	1997
Circuit Breakers - Oil	138 kV	EA	1	1983
Circuit Breakers - Air	13-26 kV	EA	4	1983
Circuit Breakers - Air	13-26 kV	EA	1	2002
Control Batteries		KAH	0.12	1983
Battery Chargers		EA	1	1983
Aluminum Bus		LF	300	1983
Breaker Control Panel		EA	5	1983
Breaker Control Panel		EA	1	2002
Poles, Galv. Steel	35'	EA	3	1983
Mercury Vapor Ext. Fixtures	400W	EA	2	1983
Steel Support Structure, Small		EA	10	1983
Steel Support Structure, Large		EA	1	1983
Grounding, bare copper	4/0	SCLF	1,000	1983
Grounding Rods	8'	EA	12	1983
Chain Link Fence		LF	408	1983
Concrete Foundation		CY	198	1983
Substation #4				
Transformer, PT	13-26 kV	EA	6	1977
Fuses	13-26 kV	EA	6	1977
Voltage Regulators	13-26 kV	EA	2	1977
Disconnect Switches, GOAB	13-26 kV	EA	6	1977
Lightning Arresters	13-26 kV	EA	21	1977
Lightning Arresters	13-26 kV	EA	3	1992
Circuit Breakers - Air	13-26 kV	EA	10	1977
Circuit Breakers - Air	13-26 kV	EA	1	1992
Control Batteries		KAH	0.24	1977
Battery Chargers		EA	2	1977
Breaker Control Panel		EA	10	1977
Breaker Control Panel		EA	1	1992
Sectionalizing Switch, 4-way		EA	1	1992
Poles, Galv. Steel	35'	EA	4	1977

Component	Size	Unit	Quantity	Approximate Year of Construction
Mercury Vapor Ext. Fixtures	400W	EA	3	1977
Steel Support Structure, Small		EA	2	1977
Grounding, bare copper	4/0	SCLF	1,000	1977
Grounding Rods	8'	EA	12	1977
Chain Link Fence		LF	410	1977
Concrete Foundation		CY	145	1977
Substation #5				
Transformer, Power	138 kV	MVA	12	1977
Transformer, Power	138 kV	MVA	24	1992
Transformer, CT	13-26 kV	EA	3	1977
Transformer, CT	13-26 kV	EA	6	1992
Transformer, PT	13-26 kV	EA	4	1977
Transformer, PT	13-26 kV	EA	8	1992
Fuses	13-26 kV	EA	5	1977
Fuses	13-26 kV	EA	10	1992
Voltage Regulators	13-26 kV	EA	1	1977
Voltage Regulators	13-26 kV	EA	2	1992
Insulators, Pedestal		EA	12	1977
Insulators, Pedestal		EA	24	1992
Disconnect Switches, GOAB	13-26 kV	EA	1	1977
Disconnect Switches, GOAB	13-26 kV	EA	2	1992
Disconnect Switches, 1 PH	13-26 kV	EA	2	1977
Disconnect Switches, 1 PH	13-26 kV	EA	3	1992
Lightning Arresters	13-26 kV	EA	15	1977
Lightning Arresters	13-26 kV	EA	36	1992
Lightning Arresters	138 kV	EA	3	1977
Lightning Arresters	138 kV	EA	6	1992
Circuit Breakers - Air	13-26 kV	EA	5	1977
Circuit Breakers - Gas	138 kV	EA	1	1977
Circuit Breakers - Gas	138 kV	EA	2	1992
Circuit Breakers - Vacuum	13-26 kV	EA	7	1992
Control Batteries		KAH	0.12	1977
Control Batteries		KAH	0.24	1992
Battery Chargers		EA	1	1977
Battery Chargers		EA	2	1992
Aluminum Bus		LF	400	1977
Aluminum Bus		LF	800	1992
Breaker Control Panel		EA	6	1977
Breaker Control Panel		EA	14	1992
Poles, Galv. Steel	35'	EA	1	1977
Poles, Galv. Steel	35'	EA	1	1992
Mercury Vapor Ext. Fixtures	400W	EA	1	1977
Mercury Vapor Ext. Fixtures	400W	EA	1	1992

Component	Size	Unit	Quantity	Approximate Year of Construction
Steel Support Structure, Small		EA	5	1977
Steel Support Structure, Small		EA	9	1992
Grounding, bare copper	4/0	SCLF	1,000	1977
Grounding, bare copper	4/0	SCLF	800	1992
Grounding Rods	8'	EA	12	1977
Grounding Rods	8'	EA	9	1992
Chain Link Fence		LF	375	1977
Concrete Foundation		CY	100	1977
Concrete Foundation		CY	200	1992
Poles				
Wood	45'	EA	1,410	1976
Wood	45'	EA	50	1980
Pole Arms	6'	EA	1,604	1976
Pole Arms	6'	EA	52	1980
Additional Inventory				
Underground Cable Splicing		EA	200	1976
Guys Anchors and Hardware		EA	160	1976
Lightning Arresters	13-26 kV	EA	400	1976
Lightning Arresters	13-26 kV	EA	20	1980
Sectionalizing Switch, Pad Mt.		EA	49	1976
Sectionalizing Switch, Pole Mt.		EA	4	1976
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	428	1976
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	131	1977
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	50	1980
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	18	1985
Terminator Cable – Outdr, Pole Mt.	15 kV	EA	118	1976
Terminator Cable – Outdr, Pole Mt.	15 kV	EA	32	1980
Meters		EA	445	1985*
Joints and Dead Ends		EA	72	1976
Load Interrupter Switches	13.8 kV	EA	3	1976
Utility Vault/Manhole	6x10x6	EA	261	1976
Utility Vault/Manhole	6x10x6	EA	14	1985
Utility Vault/Manhole	6x10x6	EA	14	1990
Fused Cutouts	8.3 kV	EA	300	1976
Pole, Grounding	8'	EA	1,200	1976
Transformer Pads	4x6	SF	182	1976
INSIDE BLDG. 3001				
Conductor UG, Copper	#2	SCLF	23,400	1976
Conductor UG, Copper	4/0	SCLF	510	1976
Conductor UG, Copper	500 MCM	SCLF	43,807	1976
Conductor UG, Copper	750 MCM	SCLF	8,310	1976
3 PH, Dry Type	1000 kVA	EA	1	1976
3 PH, Dry Type	1000 kVA	EA	12	1977

Component	Size	Unit	Quantity	Approximate Year of Construction
3 PH, Dry Type	1000 kVA	EA	3	1978
3 PH, Dry Type	1000 kVA	EA	1	1979
3 PH, Dry Type	1000 kVA	EA	2	1983
3 PH, Dry Type	1000 kVA	EA	2	1989
3 PH, Dry Type	1000 kVA	EA	1	1993
3 PH, Dry Type	1000 kVA	EA	2	2000
3 PH, Dry Type	1500 kVA	EA	1	1977
3 PH, Dry Type	2000 kVA	EA	1	1997
3 PH, Dry Type	2500 kVA	EA	2	1977
3 PH, Dry Type	2500 kVA	EA	2	1996
Conduit, Galv. Steel	4"	LF	7,732	1976
Cable Tray	12"	LF	9,733	1976
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	3	1976
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	42	1977
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	9	1978
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	3	1979
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	6	1983
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	6	1989
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	3	1993
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	6	1996
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	3	1997
Terminator Cable – Indoor, Pad Mt.	15 kV	EA	6	2000
Load Interrupter Switches	13.8 kV	EA	93	1976

Notes:

*Dates unknown – 1985 estimated

UG = underground

OH = overhead

ACSR = aluminum-conducting-steel-reinforced

Ext. = exterior

PVC = polyvinyl chloride

SF = square foot

KAH = kilo ampere hours

kW = kilowatt

MVA = mega volt ampere

Galv. = galvanized steel

MCM = thousand circular mils

Mt. = mount

PT = potential

PH = phase

kV = kilovolt

kVA = kilovolt ampere

GOAB = gang operated air brake

LF = linear feet

EA = each

SCLF = single conductor linear feet

MVAR = mega volt ampere reactive

CY = cubic yards

Outdr. = outdoor

Conc. = concrete

W = watt

CT = current

J1.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
 Spare Parts
Electric Distribution System – Tinker AFB

Quantity	Item	Description	Remarks
14	Pad Mount Switches	Pad Mount Sectionalizing Switches (4-way)	
1	Padmount Transformer	3-Phase 75kVA 170/208 Voltage	
1	Padmount Transformer	3-Phase 75kVA 277/480 Voltage	
2	Padmount Transformer	3-Phase 112.5kVA 277/480 Voltage	
2	Padmount Transformer	3-Phase 150kVA 120/208 Voltage	
5	Padmount Transformer	3-Phase 150kVA 277/480 Voltage	
1	Padmount Transformer	3-Phase 167kVA 120/240 Voltage	
6	Padmount Transformer	3-Phase 225kVA 120/208 Voltage	
4	Padmount Transformer	3-Phase 225kVA 277/480 Voltage	
3	Padmount Transformer	3-Phase 300kVA 120/208 Voltage	
5	Padmount Transformer	3-Phase 300kVA 277/480 Voltage	
1	Padmount Transformer	3-Phase 300kVA 2400/4160 Voltage	
4	Padmount Transformer	3-Phase 750kVA 120/208 Voltage	
3	Padmount Transformer	3-Phase 750kVA 277/480 Voltage	
1	Padmount Transformer	3-Phase 1000kVA 120/208 Voltage	
1	Padmount Transformer	3-Phase 500kVA 277/480 Voltage	
2	Padmount Transformer	3-Phase 45kVA 120/208 Voltage	
1	Padmount Transformer	3-Phase 500kVA 120/208 Voltage	Aluminum Coil
1	Padmount Transformer	3-Phase 30kVA 120/208 Voltage	Submersible
1	Padmount Transformer	3-Phase 2500kVA 480/277 Voltage	Sub Type
1	Padmount Transformer	3-Phase 37.5kVA 120/240 Voltage	
2	Padmount Transformer	3-Phase 75kVA 120/208 Voltage	
2	Padmount Transformer	3-Phase 112.5kVA 120/208 Voltage	
1	Padmount Transformer	3-Phase 150kVA 120/208 Voltage	
1	Padmount Transformer	3-Phase 150kVA 480 Voltage	
1	Padmount Transformer	3-Phase 150kVA 277/480 Voltage	
4	Padmount Transformer	3-Phase 225kVA 120/208 Voltage	
3	Padmount Transformer	3-Phase 225kVA 277/480 Voltage	
2	Padmount Transformer	3-Phase 300kVA 120/208 Voltage	
3	Padmount Transformer	3-Phase 300kVA 277/480 Voltage	
1	Padmount Transformer	3-Phase 500kVA 120/208 Voltage	
3	Padmount Transformer	3-Phase 500kVA 277/480 Voltage	

TABLE 3
 Specialized Vehicles and Tools
Electric Distribution System – Tinker AFB

Description	Quantity	Location	Maker
None			

J1.2.3 Electric Distribution System Manuals, and Records Drawings,

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
 Manuals, Drawings, and Records
Electric Distribution System - Tinker AFB

Quantity	Item	Description	Remarks
Multiple	Drawing	Electronic Utility drawings, shape files (conductors, transformers, secondary services, poles and transformers.)	Electronic format
Multiple	Project Drawings	Substation, Distribution network replacement drawings	Electronic format
Multiple	Drawings	Single line diagrams of substations, distribution network, switching diagrams, etc.	Electronic format
1	Listing	Electric Meters	Shows building served, location
1	Planning Document	General Plan	One volume
1	Planning Document	Comprehensive Plan	Multiple volumes
1	Manual	Substation Manuals	
1	Listing	Meter Listing	
1	Historical File	Consumption Data	

J1.3 Specific Service Requirements

The service requirements for the Tinker AFB electric distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Tinker AFB electric distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- The Contractor will be required to mark his own utilities and will be responsible for initiating, officiating, and tracking digging permits for his own utilities. The Contractor will provide not less than 5 and not more that 15 working days notice of any needed excavations to 72nd Civil Engineers and to said Utilities Privatization Administrative

Contracting Officer so the location of underground utilities may be located and marked by the applicable utility owner.

- IAW Condition C of Attachment 1 to the ROW, the Contractor shall follow the Base digging permit process. The Contractor shall obtain all necessary authorizations, permits and line locates prior to performing any excavations on Base.
- The Contractor shall support the Base digging permit process by routinely accepting and promptly processing digging permit requests which may impact on the integrity of the Contractor's utility system and/or the safety of the requestors. The Contractor shall be a participant of the Base digging permit process and shall attend any meetings called in support of the process. Contractor shall be responsible to locate and mark their utilities in the affected areas. The digging permit process involves weekly attendance at the scheduled meeting and subsequent appointments for location and marking of utilities throughout the week.
- Because of the critical nature of many Tinker AFB mission requirements, the Contractor will respond to electrical problems within 20 minutes of notification during duty hours and within one hour during non-duty hours.
- The Contractor's representative that responds to emergency service requests shall be knowledgeable of the utility system and the Contractor's Service Interruption/Contingency Plan. The representative shall be able to assess damages and estimate the time it will take to make temporary or full-service repairs. In accordance with Paragraph H.6, Rights of the Government to Perform Function with Its Own Personnel, the Government reserves the right to substitute or supplement the Contractor's efforts during emergency situations where the Contractor's failure or inability to perform is beyond the Contractor's control and without the Contractor's fault or negligence. In this situation, the Contractor would not be held responsible for costs incurred by the Government. However, the Contractor could be held financially responsible if the Government substitutes or supplements the Contractor's efforts during emergency situations and the Contractor's failure or inability to perform was the result of the fault or negligence of the Contractor.
- The SCADA system is not included with the electric system being privatized. The Government shall retain ownership of the sensors, communications, and other equipment associated with the SCADA system. The SCADA system may be used by the Government to monitor electric facilities. The Government will maintain the sensors, antennas, and other communications, and associated ancillary equipment. The Contractor may purchase, install, operate, and maintain a SCADA system.
- IAW Paragraph C.5.1.3, and in compliance with Base architectural standards, new and renewal distribution piping shall normally be installed using the most economical trenching method unless otherwise prohibited by the Government. Excavation of paved surfaces is prohibited without consultation and approval from the Base Civil Engineer.
- Upon reasonable request and with reasonable notice from the Base Civil Engineer, the Contractor shall provide escorted tours to provide instruction and demonstration of electric distribution system operations, maintenance and construction. The electric distribution system includes substations, transformers, other electric system devices, and the Contractor's shop(s) and storage areas.

- The Contractor shall coordinate any changes to looped circuits with the Base Civil Engineer.
- IAW Paragraph C.9, Coordination of Work, the Contractor shall coordinate planned outages using the Civil Engineer Outage Form.
- In addition to Section 8 of the ROW, the utility contractor (grantee) shall repair at no cost to the Government any utilities improperly marked by the contractor and subsequently damaged as a result of the incorrect marking by other contractors or Government organizations working in the area. Property damaged by the contractor in the conduct of his business shall be corrected in accordance with ROW Section 8.
- IAW Section 12 of the ROW, the Contractor is responsible for all supporting utilities that may be required to own, operate and maintain the utility system subject to privatization. For example, electricity is needed to power substation lighting. Supporting utilities are defined as the supply of electricity, natural gas, water, or wastewater collection, and any infrastructure or materials necessary to connect to the supply of electricity, natural gas, water, or wastewater collection. The Contractor shall coordinate with the Tinker AFB Civil Engineer and the Contracting Officer for any supporting utilities to be provided by the Government.
- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Base Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.
- The Contractor shall abide by Base fire protection requirements. The utility system purchased by the Contractor includes facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- IAW Paragraph C.9.8, Exercises and Crisis Situations Requiring Utility Support, the Contractor shall provide support as directed by Base Civil Engineer for exercises and crisis situations.
- The Contractor shall ensure that employees understand, implement and enforce Force Protection Condition (FPCON) requirements specified in AFI 10-245. The Contractor is advised that FORCE PROTECTION conditions vary and that these changes may cause delays in access to Tinker AFB. These conditions are outlined in the Tinker AFB FPCON Checklist. This checklist will be available in the technical library. The Contractor will plan accordingly to provide uninterrupted support. Compliance with and staffing in support of FORCE PROTECTION condition changes shall not result in service charge adjustments to the contract.
- IAW Section 8 of the ROW, the Contractor shall maintain existing security mechanisms (i.e. locks, fences) to protect the utility systems. The security mechanisms should prevent tampering and sabotage. Should the Contractor become aware of any suspicious incident, security breach or act of sabotage at or against the utility system, or

any of its associated facilities, they will immediately contact the Security Police Squadron and Civil Engineer Squadron.

- Due to heightened security concerns on military installations, all Contractor and subcontractor personnel who must enter Tinker AFB to perform this contract must undergo a background check. Background checks will be conducted using the following information: name, drivers license number, social security number, and date of birth. These procedures are considered permanent. Any Contractor or subcontractor employee that does not consent to this background investigation will not be allowed access to Tinker AFB. Any derogatory information resulting from the investigation, or which otherwise becomes known to the contracting officer, may also result in such individuals being prevented from entering the installation. However, nothing in this requirement shall excuse the Contractor from proceeding with any resulting contract as required.
- The Contractor shall ensure their employees, and those of their subcontractors, have the proper credentials allowing them to work in the United States. Employees must have valid Social Security Cards. Non-US Citizens must have current and valid permission from the Bureau of Immigration and Naturalization. Persons found to be undocumented or illegal aliens will be remanded to the proper authorities. The Contractor shall not be entitled to any compensation for delays or expenses associated with complying with the provisions of this requirement. Contractor personnel and their subcontractors must identify themselves as Contractors or subcontractors during meetings, telephone conversations, in electronic messages, or correspondence related to this contract. Contractor occupied facilities on Tinker AFB such as offices, separate rooms, or cubicles must be clearly identified with Contractor-supplied signs, name plates or other identification, showing that these are work areas for Contractor or subcontractor personnel.
- The Contractor shall notify OC-ALC/SEG (Safety Office) and the Contracting Officer, or a designated Government Representative (GR) within one (1) hour of all mishaps or incidents at or exceeding \$2,000 (material + labor) in damage to DOD or contractor-owned property. This notification requirement shall also include physiological mishaps/incidents. A written or e-mail copy of this mishap/incident notification shall be sent within three calendar days to the GR, who will forward it to OC-ALC/SEG (Safety Office). For information not available at the time of initial notification, the Contractor shall provide the remaining information not later than 20 calendar days after the mishap, unless extended by the Contracting Officer. Mishap notifications shall contain, as a minimum, the following information:
 - (a) Contract, Contract Number, Name and Title of Person(s) Reporting
 - (b) Date, Time and exact location of mishap/incident
 - (c) Brief Narrative of mishap/incident (Events leading to accident/incident)
 - (d) Cause of mishap/incident, if known
 - (e) Estimated cost of mishap/incident (material and labor to repair/replace)
 - (f) Nomenclature of equipment and personnel involved in mishap/incident

(g) Corrective actions (taken or proposed)

(h) Other pertinent information.

- If requested by Government Personnel or designated Government representative, the Contractor shall immediately secure the mishap scene/damaged property and impound pertinent maintenance and training records, until released by the OC-ALC Safety Office. Also, the Contractor and their subcontractors shall cooperate fully and assist Government personnel until the investigation is finalized and closed out. Safety requirements listed in this package that do not relate to the Contractor's operations or services shall be considered self-deleting as mutually agreed by the Contractor and the Contracting Officer.
- The Contracting Officer is the only individual authorized to incur Government obligations and to make changes to contracts. The Administrative Contracting Officer (ACO) may make certain obligations and changes as provided by the Federal Acquisition Regulation part 42.302 (and supplements) or as may be specifically designated in writing by the Procuring CO. The Contracting Officer's Technical Representative (COTR), if designated, is strictly limited to the authority described in the designation letter executed by the CO. The Installation Commander's duly authorized representative is strictly limited to the tasks described and under no circumstance is authorized to incur additional obligations on behalf of the Government. The Defense Energy Support Center (DESC) is the procuring agent, and after appropriate post-award contract management transition, the Contracting Directorate, Oklahoma City Air Logistics Center, shall assume the procuring and administration contracting authority.
- IAW Condition F of Attachment 1 to the ROW, the Contractor shall be responsible for grounds maintenance (except grass cutting) of all areas within the boundaries of the ROW in accordance with Base standards. Maintenance problems caused by others (AF or a third party) will not be the Contractor's responsibility.
- IAW ROW, the Contractor shall not deliberately injure or kill protected species of wildlife (i.e., non-domesticated animals) without permission from the Contracting Officer, or other representative(s) as designated by the Contracting Officer.
- IAW Condition J of Attachment 1 to the ROW, the provisions of ROW Sections 15, 17 and 18 also cover sites identified under the Resource Conservation Recovery Act (RCRA) Corrective Action program.
- The Contractor shall not perform alterations to any building or structure deemed to be eligible or potentially eligible for placement on the National Register of Historic Places until approved by said officer.

J1.4 Current Service Arrangement

OG+E provides electrical power for Tinker AFB Main Base and GSUs.

The peak month for electric consumption in fiscal year (FY) 2003 was August at 45,037 megawatt hours (MWh); July was only slightly lower. The low month was February at 31,951 MWh; November was only slightly higher. Consumption during the other 8 months was approximately 35,000 MWh. For FY 2003, total consumption was 439,541 MWh; peak

demand was 75.75 MW. Extensive historical consumption data will be available for review in the technical library.

J1.5 Secondary Metering

J1.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3.3 and J1.6 below:

TABLE 5
 Existing Secondary Meters
Electric Distribution System - Tinker AFB

Building No.	Meter No.	Serial No.	Location	Manufacturer
1	E0366	30991292	N side elc room	
1	E0367	30992225	N side in fence	General Electric
1	E0685	92568146	N end ,E Bldg, inside, platform	General Electric
1	E0686	55031903	N side in fence	Sangamo
1	E0687	70511667A	N side in fence	General Electric
3	E0533	71605841	N side , E Bldg , door 4	
3	E0534	30957972	N end inside	General Electric
3	E0535	62048356	Inside W Bldg, middle	
3	E0536	62048352	Inside W Bldg, middle	
10	E0532	92653705	Inside, N end, middle, platform	General Electric
10	E0562	92653713	Inside, middle, platform	General Electric
11	E0564	92568152	SW corner on trans	General Electric
16	E0531	30129833	S side on Bldg	Landis and GYR
18	E0349	81885772	Inside Bldg , middle, platform	General Electric
18	E0528	59499044	N end , inside , platform	General Electric
23	E0382	70549908A	SE corner on trans	General Electric
24	E0530	70511671	SW corner of Bldg	General Electric
117	E0522	59499037	SE. side on trans.	General Electric
201	E0225	67391538A	NW of Bldg on trans	
201	E0556	62048366	N side, on top of Bldg, in mech room	General Electric
201	E0557	62046669	S side, on top of Bldg, in mech room	
201	E0560	67183132	NW of Bldg on trans	General Electric
202	E0512	59499047	Nof Bldg	Westinghouse
208	E0561	59581546	E side of Bldg	Westinghouse
210	E0151	31040232	Inside E side	General Electric
210	E0153	30976939	E side of Bldg 200 in elc cabinet	General Electric
210	E1399	30976938	E side of Bldg 200 in elc cabinet	General Electric
214	E0156	31011510	Door next to stairwell W side basement	General Electric
215	E0543	30999664	NW corner of Bldg in mech room	General Electric
216	E0509	62055939	S side transformer	General Electric
217	E0518	57888867	East of Bldg	Westinghouse
219	E1414	59499048	W side on trans.	
220	E0516	82861900	NE. corner mech. Room	General Electric
229	E1532	2060478	SE corner of Bldg on trans	E-mon-d-mon

Building No.	Meter No.	Serial No.	Location	Manufacturer
230	E0132	67591745	S center next to Cooling Tower	Secured Area
230	E0134	62046668	SW corner in elc. cabinet	General Electric
230	E0135	62048353	NW hanger inside mech room	General Electric
230	E0136	82768516A	NW hanger inside Mech Room	General Electric
230	E0137	62046672	Past Hanger center Bldg Mech Rm.	General Electric
230	E0139	62048359	Past Hanger center Bldg Mech Rm.	General Electric
230	E0140	62048351	NE hanger center mech room	General Electric
230	E0141	82768512	NE hanger center mech room	General Electric
230	E0760	82768513A	Past Hanger center Bldg Mech Rm.	General Electric
238	E0520	62046811	W side of 241	General Electric
240	E0143	30921743	Inside Base Ops to left Mech Rm.	General Electric
244	E1054	92653720	W side of Bldg. 241	General Electric
250	E0525	78847281	SE corner on Bldg	General Electric
260	E0505	92653654	E of Bldg	American Meter
267	E0507	64835557	NE corner on trans	General Electric
268	E1398	68101054	Bldg. 267 N. Side	Sangamo
280	E0508	30939506	Inside Room 111	General Electric
282	E0542	70136981	N side of Bldg on trans	General Electric
283	E0510	17-91821A10	N side Mech Rm.	
284	E0511	17-12716-F10	E side Mech Rm.	
285	E0513	76640934	NW of Bldg on trans	General Electric
289	E0519	70512218	N of Bldg on trans	General Electric
296	E0563	547254	SW corner mech room	Westinghouse
400	E0487	80285100	N side transformer	Westinghouse
412	E0482	59499039	N side trans	Westinghouse
412	E0483	62048354	Inside column TCS Platform	General Electric
413	E0331	92653742	Under Water Tower	General Electric
414	E0628	31058753	N side mech room	General Electric
416	E0488	30998500	NE Corner inside, floor	General Electric
416	E0489	62048357	E 20 platform, W	General Electric
416	E0490	62048361	E8 platform, W	General Electric
420	E0044	64384504	NE corner in fence	General Electric
452	E0540	58989120	NE side of Bldg 420 in parking lot on trans	General Electric
460	E0541	92604916	S side of Bldg on trans	General Electric
460	E0917	92604914	S side of Bldg on trans	General Electric
469	E0503	31049236A	W side Door 5	General Electric
472	E1470	1844	W side mech room	General Electric
477	E0036	30925770	W side Equip Rm.	General Electric
478	E0032	51064460	NW side Equip Rm.	General Electric
504	E0363	71410208	Inside Bldg	Westinghouse
504	E0374	71410215A	Inside Bldg	Westinghouse
506	E0364	31048576	V-9 Plat	General Electric
506	E0365	31052633	V-22 Plat	General Electric
510	E0083	59891476	F1 Plat inside Ent 6	Westinghouse
510	E0361	11172549	F13 Plat inside Ent 6	Westinghouse
590	E0491	32832804	W of Bldg next to trans	Landis and GYR
591	E0493	T00010021	N side of Bldg sub.	
685	E1040	92653656	Inside E side, door right of fence	

Building No.	Meter No.	Serial No.	Location	Manufacturer
765	E0910	92653623	NE corner	General Electric
768	E1044	92653850	NE corner	General Electric
769	E1045	92653638	NW corner	General Electric
769	E1046	92653619	SW corner	General Electric
770	E1047	92653621	NW corner on Bldg	General Electric
803	E0992	79026121A	SE corner of Bldg	Equimeter
808	E0875	202891A	E side of Bldg in elc cabinet	General Electric
810	E1582	55357276	NW side of Bldg next to fence	
810	E1581	21425206	NW side of Bldg on trans	
811	E1583	87185572	W side of Bldg	
815	E1457	T00001742	South on Bldg	E Mon-D-Mon
820	E0058	87264670	S of Bldg across parking lot next to RD.	General Electric
820	E0059	89603676	NW of Bldg across tarmac on trans	General Electric
820	E0061	31037573	SW side mech room	General Electric
820	E0062	31037575	SW side mech room	General Electric
820	E0064	31037572	SE side mech room	General Electric
820	E0065	31037574	SE side mech room	General Electric
821	E0073	31037079	SE corner of Bldg in elc cabinet	General Electric
821	E0074	31037080	SE corner of Bldg in elc cabinet	General Electric
825	E0069	31038624	S side mech room	General Electric
829	E0067	31037081	Inside Bldg	General Electric
829	E0068	31037078	Inside Bldg	General Electric
830	E0053	80306351	SE corner of Bldg 848	General Electric
830	E0054	31034863	S side of Bldg in elc cabinet	General Electric
830	E0055	31034864	S side of Bldg in elc cabinet	General Electric
847	E0915	T00010047	Se side of Bldg on trans	E Mon-D-Mon
848	E0914	94080120	SE corner of Bldg on trans	E Mon-D-Mon
850	E0671	92581007	N of Bldg 849 on trans	General Electric
860	E1419	95915749	NW corner of Bldg on trans	General Electric
928	E0529	74254156	W side of Bldg	
976	E0469	77485459	South side of Bldg in elc cabinet	General Electric
976	E0470	77485460	South side of Bldg in elc cabinet	General Electric
986	E0473	70541433	East side of Bldg	General Electric
989	E0475	30981438	NE side mech room	General Electric
995	E0077	31036261	Inside Bldg	
996	E0465	30979048	Inside Bldg	General Electric
1002	E0405	73036643	S side in fence	Sangamo
1010	E0406	64724353	SW of Bldg on trans	General Electric
1017	E0423	50664057	S side of Bldg on trans	General Electric
1019	E0477	48670915	SE corner on Bldg	General Electric
1022	E0907	92653626	W of Bldg across road on pole	General Electric
1029	E0420	37736692	N side in fence	Handis & GYR
1030	E0438	70511683	W side on trans	General Electric
1041	E0873	92655957	W side on trans	General Electric
1046	E0662	93951619	NE side of camp ground in cage	Schlumberger
1046	E0726	95998089	NE side of camp ground in cage	Schlumberger
1046	E0738	39444786	NE side of camp ground in cage	Sangamo
1046	E1127	94084905	NE side of camp ground in cage	Schlumberger

Building No.	Meter No.	Serial No.	Location	Manufacturer
1046	E1445	83132275	NE side of camp ground in cage	Sangamo
1046	E1465	94084900	E side of camp gound	General Electric
1047	E0793	86191523A	SE corner on trans	General Electric
1050	E0086	72978905A	E side on Bldg	Sangamo
1051	E0830	92653637A	N of Bldg on pole	General Electric
1052	E0892	92653641	N of 1051 on pole	General Electric
1055	E0128	92653652	NW corner on trans	WestingHouse
1067	E0785	70565857	SW corner on trans	Rockwell
1068	E0838	92568155	S side on trans	General Electric
1070	E0791	73071584A	S side on trans	General Electric
1077	E0422	79087121	SW corner of Bldg	General Electric
1082	E1534	49257134	W side on trans	Landis and GYR
1083	E0434	31047231	S side in mech room	General Electric
1083	E0435	31045515	S side in mech room	General Electric
1083	E1535	92653730	100 yards N of Bldg on trans	General Electric
1088	E0655	55627157	SW side on pole	WestingHouse
1090	E0426	70511689	Inside fence next to road	General Electric
1093	E1420	95890031	N side on trans	Rockwell
1096	E0461	73071583	W of Bldg across road on trans	Sangamo
1100	E0460	70511669	E side on trans	General Electric
1107	E1064	31055882	NW side of Bldg	General Electric
1111	E0462	74006088	S side on Bldg	Sangamo
1118	E0952	92653732	W side on pole	General Electric
1122	E1427	95890021	SE corner on trans	General Electric
1122	E1466	92653726	SE corner on trans	General Electric
1133	E1467	D00010882	N side on Bldg	General Electric
1145	E0463	94084891	E side of Bldg	Schlumberger
1156	E1472	92581014	N side of Bldg	General Electric
2101	E0124	55031899	Inside e side on platform	Westinghouse
2101	E0126	86120051	Inside W side in metal shop on platform	Emon Demon
2101	E0127	31002007	Inside NW corner in cage	General Electric
2102	E0122	31000882	Inside Bldg	General Electric
2102	E0123	31000778	Inside Bldg	General Electric
2111	E0090	70512215A	W of 2111 in fence	General Electric
2111	E0118	70511665	W of 2111 in fence	General Electric
2111	E0119	70540734	Inside Bldg	General Electric
2113	E0291	70511688	W side on Bldg	General Electric
2119	E0290	70584918	E side on trans	
2121	E0114	87010166	E Ele vault	General Electric
2121	E0115	87010052	W E Vault	Emon Demon
2121	E0116	86149769	Outside of W elc room	General Electric
2122	E0107	31034220	N of Bldg in elc cabinet	General Electric
2122	E0108	87010167	W elc room	General Electric
2122	E0111	87010161	E elc room	Emon Demon
2122	E0112	71648978	S side center dark grey elc cabinet	Westinghouse
2122	E0113	71648979	S side center dark grey elc cabinet	Westinghouse
2136	E0120	77890234	SW side elc cabinet	Westinghouse
2136	E0121	77890233	SW side elc cabinet	Westinghouse

Building No.	Meter No.	Serial No.	Location	Manufacturer
2210	E0104	30898933	SW corner inside, round lock	General Electric
2210	E0105	30898932	SW corner inside, round lock	General Electric
2211	E0103	92653706	SW corner inside mech room	General Electric
2211	E1032	92580997	Inside along south wall	General Electric
2211	E1033	92580987	Inside along south wall	General Electric
2211	E1034	92653698	Inside along south wall	General Electric
2211	E1035	92581008	Inside along south wall	General Electric
2211	E1036	92653627	Inside along south wall	General Electric
2212	E0294	92653690	NW corner on trans	General Electric
2280	E0088	62980508	W side center on Trans N side	Westinghouse
2280	E1458	95985483	W side of Bldg on trans.	General Electric
2999	E0342	76640846	Elc Sign E of 3001	General Electric
3001	E0157	79191161	x-10	
3001	E0158	64503569	w-39	General Electric
3001	E0159	64508586	w-39	General Electric
3001	E0161	79154038	w-39 reads all zeros	
3001	E0162	64715734	T-41	General Electric
3001	E0163	64715735	T-41	General Electric
3001	E0164	64715741	T-41	General Electric
3001	E0165	79154040	T-41	General Electric
3001	E0166	64503568	W-51	General Electric
3001	E0167	64504995	W-51	General Electric
3001	E0168	64508585	W51	General Electric
3001	E0169	64715733	S-53	General Electric
3001	E0170	64715736	S-53	General Electric
3001	E0171	64715742	S-53	General Electric
3001	E0172	79154041	S-53	General Electric
3001	E0173	82861142	W-67	General Electric
3001	E0174	82861140	W-67	General Electric
3001	E0175	82861141	W-67	General Electric
3001	E0176	31048862	Upstairs SE end of boiler rm.	
3001	E0177	69881489	Boiler Room/Load Center	General Electric
3001	E0178	69881457	Boiler Room/Load Center	General Electric
3001	E0182	64558123	W-91	General Electric
3001	E0183	64558126	W-91	General Electric
3001	E0184	64558127	W-91	General Electric
3001	E0185	91415459	S-91	General Electric
3001	E0186	64508584	S-91	General Electric
3001	E0187	64504994	S-91	General Electric
3001	E0188	64503571	W-105	General Electric
3001	E0189	64504993	W-105	General Electric
3001	E0190	76690434	W-105	General Electric
3001	E0191	76689913	W-105	General Electric
3001	E0195	30994086	N. Bldg	Demand
3001	E0196	30994087	N. Bldg	Demand
3001	E0197	67185761	N. Bldg	WestingHouse
3001	E0198	67185759	N. Bldg	WestingHouse
3001	E0199	71523089	Q-111	WestingHouse
3001	E0200	64284700	Q-111	WestingHouse

Building No.	Meter No.	Serial No.	Location	Manufacturer
3001	E0202	40323387	Q-111	General Electric
3001	E0204	62583740	C-105	WestingHouse
3001	E0205	64287172	O-103	WestingHouse
3001	E0206	64284694	O-103	WestingHouse
3001	E0207	64284695	O-103	WestingHouse
3001	E0208	64287169	O-93	General Electric
3001	E0209	64284693	O-93	General Electric
3001	E0210	64284698	O-93	General Electric
3001	E0211	64287171	G-95	General Electric
3001	E0212	64284701	G-95	General Electric
3001	E0213	71448283	G-89	General Electric
3001	E0214	31005199	O-83	General Electric
3001	E0215	64284692	O-83	General Electric
3001	E0216	64284696	O-83	General Electric
3001	E0217	64284697	O-83	General Electric
3001	E0218	64287170	G-81	General Electric
3001	E0219	64284699	G-81	General Electric
3001	E0220	64284702	G-81	General Electric
3001	E0222	55031901	J-7	
3001	E0227	64715732	O-71	General Electric
3001	E0228	64715740	O-71	General Electric
3001	E0229	64715737	O-71	General Electric
3001	E0230	64715731	P-65	General Electric
3001	E0231	64715739	P-65	General Electric
3001	E0232	64715738	P-65	General Electric
3001	E0233	79154039	P-65	General Electric
3001	E0235	55065687	Door G-51.5(fixed)	Power Logic
3001	E0236	55065686	Door G 51.5(fixed)	Power Logic
3001	E0569	64287168	Q-111	WestingHouse
3001	E0570	79191160	J-111	General Electric
3001	E1502	3001 Plant	Chiller 1 @ xfrm	
3001	E1503	3001 Plant	Chiller 2 @ xfrm	
3001	E1504	3001 Plant	Chiller 3 @ xfrm	
3001	E1505	3001 Plant	Chiller 4 @ xfrm	
3001	E1506	3001 Plant	CW left top/West wall(meter turned off)	
3001	E1507	3001 Plant	CW Left 2nd down /west wall	
3001	E1508	3001 Plant	CW Left 3rd down /west wall	
3001	E1509	3001 Plant	CW Left 4th down /west wall	
3001	E1510	3001 Plant	CW Right top/ west wall	
3001	E1511	3001 Plant	CW Right 2nd down /west wall	
3001	E1512	3001 Plant	CW Right 3rd down /west wall	
3001	E1513	3001 Plant	CW Right 4th down /west wall	
3001	E1514	3001 Plant	CW Left top /west wall	
3001	E1515	3001 Plant	CW Left 2nd down /west wall	
3001	E1516	3001 Plant	CW Right top /west wall	
3001	E1517	S. Admin vault	East Meter	
3001	E1518	S. Admin vault	West Meter	
3001	E1519	Annex 4 N.E.	N Meter (read west end)	

Building No.	Meter No.	Serial No.	Location	Manufacturer
3001	E1520	3001 Annex 4 N.E.	South Meter (read west end)	
3001	E1522	3001 Heat Treat South	W. side of 3001 in elc cabinet	
3001	E1523	Heat Treat North	W. side of 3001 in elc cabinet	
3001	E1524	IAG70A	Main Rest. B3001	
3001	E1525	IAF66A	Main Rest. B3001	
3001	E1526	IAH66B	Main Rest. B3001	
3001	E1527	IAG65A.1	Main Rest. B3001	
3001	E1530	Pratt/Whitney	NW corner of 3001,inside,SE corner of room	
3102	E0276	57195148	S side inside on platform	General Electric
3102	E0277	57195145	N side inside ,upstairs, elc room (no key)	General Electric
3105	E0278	57195144	Break room inside mech room	General Electric
3105	E0279	30925373	NE side of Bldg in elc cabinet	General Electric
3105	E0280	57195147	NE side of Bldg in mech room	General Electric
3108	E0282	57195146	SE end of Bldg mech room	General Electric
3108	E1475	D4	South end of Bldg in mech room	General Electric
3108	E1477	F22	Middle Section E side mech room	
3108	E1478	30999885	E side elc cabinet (running backwards)	
3108	E1479	H-34-B	NE side mech room	
3108	E1480	H-34-A	NE side mech room	
3113	E0803	62191450A	N side mech room	General Electric
3117	E0909	92581011	Inside N end of Bldg	General Electric
3125	E0911	92581012	E Bldg on wall outside	General Electric
3126	E0352	70472372	Next to elc sign Nof 3001	
3202	E0299	70511686	W side on trans.	General Electric
3209	E0296	T00001827	S side on Bldg.	
3211	E0297	70511687	S side on Bldg.	General Electric
3220	E0261	70514645		
3220	E0266	30975540	S side mech room (west)	General Electric
3220	E0269	30975545	S side mech room (west)	General Electric
3220	E0275	394550	NW corner in cabinet	General Electric
3220	E0371	31010969	S side mech room (East)	General Electric
3220	E0372	31010838	S side mech room (East)	General Electric
3221	E0255	71667797	E side mech room on platform	Westinghouse
3221	E0256	71667800	E side mech room on platform	Westinghouse
3221	E0257	71667796	Ramp N small door office L upstairs	Westinghouse
3221	E0258	71667799	Ramp N small door office L upstairs	Westinghouse
3221	E0259	71667795	E side mech room, W wall	Westinghouse
3221	E0260	71667798	E side mech room, W wall	Westinghouse
3234	E0247	30879134	E side in fence in cabinet	General Electric
3234	E0248	30878881	E side in fence in cabinet	General Electric
3305	E1500	3001 C. Tower	South MCC	
3305	E1501	3001 C. Tower	NMCC	

Building No.	Meter No.	Serial No.	Location	Manufacturer
3333	E0316	78902337	S side on Bldg	General Electric
3334	E1468	95850466	E side in fence on trans	General Electric
3502	E0347	62691260	NW of Bldg 3507 in elc cabinet	General Electric
3507	E0748	92581009	N side on Bldg.	General Electric
3703	E0242	30959236	W side in fence	General Electric
3703	E0243	70511685	W side in fence	General Electric
3703	E0840	97173742	E side on trans	General Electric
3705	E0319	30994665	N door 3, go to door 9	General Electric
3705	E0320	31025544	E side door B in cage door 13	General Electric
3705	E0321	31028035	E side door 17 in cage	General Electric
3707	E0252	80887741	W side mech room	General Electric
3707	E0253	80887742	W side mech room	General Electric
3708	E0375	31045411	W side mech room	General Electric
3708	E0376	31045410	W side mech room	General Electric
3761	E0267	92568160	E side of Bldg on transformer	General Electric
3812	E0690	92568153	SW of Bldg on trans.	
3900	E0899	929111	Secured Area	General Electric
3900	E0900	929112	Secured Area	General Electric
3902	E0843	31052455	S center inside mech room	General Electric
3902	E0847	31052494	S center inside mech room	General Electric
3902	E0855	31052454	SW corner at dock in mech room	General Electric
3902	E0859	31052477	SW corner at dock in mech room	General Electric
3904	E0820	76379478	W side on trans.	General Electric
4001	E1053	92653744	NW corner on trans	General Electric
4002	E0799	82853553A	Entrance gate make right in field on pole	General Electric
4012	E079	78790663	W side on Bldg	General Electric
4029	E0337	92698048	S of Bldg on trans	General Electric
4045	E0703	37859378	S side on Bldg	General Electric
4048	E0692	76588086A	W Bldg 4032	General Electric
4057	E0335	92653718	N Bldg transfer box	General Electric
4058	E0681	71455112	S of Bldg on trans	Westinghouse
4058	E1473	92653735	S of Bldg on trans	General Electric
4064	E0555	92653683	S side of Bldg	General Electric
4068	E0273	92653725	East side on trans	General Electric
4069	E0272	37415254	W Bldg equipment room	Landis and GYR
4077	E0705	73058573	W side of Bldg	Sangamo
6001	E0007	82692150	N side on trans	General Electric
6002	E0399	55397938	W of Bldg	General Electric
6004	E0392	92653709	N side on trans	General Electric
6006	E0670	95890020	Car Wash Room	
6020	E0908	94084892	N side of 6004 on trans	General Electric
6601	E0003	59499042	W side in fence on trans	General Electric
6604	E0004	73012316	NW corner of Bldg	General Electric
6604	E0005	61112222	N side of Bldg	General Electric
6642	E1393	92653734	N side on trans	General Electric
61018	E0008	70509769	N side on Bldg	General Electric
61019	E0001	85008786	E side on Bldg	General Electric
62503	E0350	30971397	Inside Bldg	General Electric

Building No.	Meter No.	Serial No.	Location	Manufacturer
62516	E0351	70446999	Water waste South side of Bldg	General Electric
BK	E1469	86317564	SE of Bldg	General Electric
Sub2	E1553	30856409	Metering shack	General Electric
Sub2	E1554	30856389	Metering shack	General Electric
Sub2	E1555	30856969	Metering shack	General Electric
Sub2	E1556	30876875	Metering shack	General Electric
Sub2	E1557	30903125	Metering shack	General Electric
Sub2	E1558	30848077	Metering shack	General Electric
Sub2	E1559	30876564	Metering shack	General Electric
Sub2	E1560	179546486	High Voltage Yard	General Electric
Sub2	E1561	17954677G	High Voltage Yard	General Electric
Sub2	E1562	17954651G	High Voltage Yard	General Electric
Sub3	E1536	30976072	Metering shack	General Electric
Sub3	E1537	30976178	Metering shack	General Electric
Sub3	E1538	30976073	Metering shack	General Electric
Sub3	E1539	30976179	Metering shack	General Electric
Sub3	E1540	21412082	Metering shack	General Electric
Sub3	E1541	17954680	High Voltage Yard	General Electric
Sub4	E1542	30978098	Metering shack	General Electric
Sub4	E1543	30893711	Metering shack	General Electric
Sub4	E1544	30894173	Metering shack	General Electric
Sub4	E1545	30893708	Metering shack	General Electric
Sub4	E1546	31049222	Metering shack	General Electric
Sub4	E1547	31038292	Metering shack	General Electric
Sub4	E1548	30893707	Metering shack	General Electric
Sub4	E1549	30893706	Metering shack	General Electric
Sub4	E1550	30893705	Metering shack	General Electric
Sub4	E1551	30893709	Metering shack	General Electric
Sub4	E1552	30978040	Metering shack	General Electric
Sub5	E1563	31060569	Metering shack	General Electric
Sub5	E1564	31052023	Metering shack	General Electric
Sub5	E1565	31019780	Metering shack	General Electric
Sub5	E1566	31049290	Metering shack	General Electric
Sub5	E1567	31049288	Metering shack	General Electric
Sub5	E1568	31049262	Metering shack	General Electric
Sub5	E1569	31049237	Metering shack	General Electric
Sub5	E1570	31049289	Metering shack	General Electric
Sub5	E1571	31049287	Metering shack	General Electric
Sub5	E1572	31049265	Metering shack	General Electric
Sub5	E1573	31049264	Metering shack	General Electric
Sub5	E1574	31049266	Metering shack	General Electric
Sub5	E1575	31049286	Metering shack	General Electric
Sub5	E1576	31049263	Metering shack	General Electric
Sub5	E1577	51 Main Feeder	Metering shack	General Electric
Sub5	E1578	90080177	High Voltage Yard	General Electric
Sub5	E1579	90080163	High Voltage Yard	General Electric
Sub5	E1580	90080148	High Voltage Yard	General Electric
Reimbursable Customers				
B815	E1457		Navy Area	

Building No.	Meter No.	Serial No.	Location	Manufacturer
B820	E0058		Navy Area	
B820	E0059		Navy Area	
B820	E0061		Navy Area	
B820	E0062		Navy Area	
B820	E0064		Navy Area	
B820	E0065		Navy Area	
B821	E0073		Navy Area	
B821	E0074		Navy Area	
B825	E0069		Navy Area	
B829	E0067		Navy Area	
B829	E0068		Navy Area	
B830	E0053		Navy Area	
B830	E0054		Navy Area	
B830	E0055		Navy Area	
B847	E0915		Navy Area	
B848	E0914		Navy Area	
B6020	E0908		Golf Course	
B6601	E0003		Golf Course	
B6642	E1393		Golf Course	
B5703	E0027		Bowling Center	
B6006	E0670		Car Wash	
B5935	E0011		Outdoor Recreation	
B1046	E0662		Family Camp	
B1046	E0726		Family Camp	
B1046	E1127		Family Camp	
B1046	E1445		Family Camp	
B1046	E1465		Family Camp	
B5603	E0028		Officers Club	
B5603	E0029		Officers Club	
B6001	E0007		Old Enlisted Club	
B1156	E1472		Recycling	
B3001	E1530		Pratt & Whitney	

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3 and J1.6 below.

TABLE 6
 New Secondary Meters
Electric Distribution System - Tinker AFB

Meter Location	Meter Description
The Installation has identified no new secondary meter requirements.	

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice** (IAW G.2): The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Address: 72 ABW/CE
 7535 5th Street (Bldg 400)
 Tinker AFB, OK 73145-9010
Phone number: (405) 734-3451

2. **Outage Report:** The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Address: 72 ABW/CE
 7535 5th Street (Bldg 400)
 Tinker AFB, OK 73145-9010
Phone number: (405) 734-3451

3. **Meter Reading Report:** The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Address: 72 ABW/CE
 7535 5th Street (Bldg 400)
 Tinker AFB, OK 73145-9010
Phone number: (405) 734-3451

4. **System Efficiency Report:** If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Address: 72 ABW/CE
 7535 5th Street (Bldg 400)
 Tinker AFB, OK 73145-9010
Phone number: (405) 734-3451

J1.7 Energy Saving Projects

There are continuing Demand Side Management (DSM) initiatives for Tinker AFB. However, these projects should not materially affect that portion of the electric distribution system included in this package. There are also multiple Energy Saving Performance Contract (ESPC) efforts ongoing. These generally affect HVAC systems and interior lighting and should have no effect on this electrical distribution systems privatization. The Contractor will be expected to cooperate with the Air Force on continuing DSM and ESPC initiatives.

J1.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Tinker AFB boundaries, the boundaries of Tinker GSUs, and easements/right-of-ways granted to the AF.

J1.9 Off-Installation Sites

All Tinker AFB GSUs (EIG, CHOT Site, and Glenwood) are described in the preceding paragraphs. Only the EIG and CHOT sites have Air Force-owned electric distribution system components included in this solicitation.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
 Service Connections and Disconnections
Electric Distribution System - Tinker AFB

Location	Description
Housing Area	As stated earlier (paragraph J1.1.5), all housing area electric distribution components are excluded from this package and are included in the ongoing Housing Privatization (HP) initiative. Associated points of demarcation are described in the ROW documents. However, as the HP initiative evolves with demolition, new construction, etc., these points of demarcation will change. The general trend will be to isolate the housing areas on their own dedicated electrical feeder leaving only non-housing facilities connected to the UP electric distribution lines.

J1.11 Government Recognized System Deficiencies

Generally, the electric system is in good condition. The substations require significant work to ensure adequate power for the increasing demand. Several substation transformers should be replaced. The South Forty Area does not have a loop-feed capability. A feeder fault would cause all downstream facilities to be without power until the cable was prepared. OH lines should be replaced with an UG system. New substations are required to support increased requirements in the South Forty and Area C. Much of the electrical duct bank is old and constructed with materials that are failing. These older duct banks should be replaced.

Electrical projects that have some form of programming/planning action underway are listed in **Table 8**; the latest information on these projects will be available in the technical library. The Government recognizes these improvement projects as representing current deficiencies associated with the Tinker AFB electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
 System Deficiencies
Electric Distribution System - Tinker AFB

Project Number	Project Description	Program Amount (000)
993020	Upgrade Electric Distribution, Phase 1	\$5,000
943371	Construct Electric Substation	\$2,500
Not Available	Replace Duct Bank East Drive (Bldg 3900-Bldg 2136)	Not Available
Not Available	Replace Transformer Bldg 272 Substation	Not Available
Not Available	Replace Transformer Bldg 3001 Substation	Not Available